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April 17, 2006

Mr. Robert Coleman
Director, Office of Secondary Market Oversight
Farm Credit Administration
1501 Farm Credit Drive
McLean, VA 22102-5090

Re: Proposed Rule: "Federal Agricultural Mortgage Corporation Funding and Fiscal Affairs; Federal Agricultural Mortgage Corporation Disclosure and Reporting Requirements; Risk Based Capital Requirements" 12 CFR Parts 652 and 655, November 17, 2005

Dear Mr. Coleman:

The Federal Agricultural Mortgage Corporation ("Farmer Mac") is pleased to have this opportunity to respond to the request for public comment on the rule proposals published by the Farm Credit Administration ("FCA") with respect to the regulations governing Farmer Mac, and, in particular, the proposed amendments to the risk-based capital ("RBC") regulations ("RBC Proposals").

We agree with many aspects of the RBC Proposals and support the efforts of FCA to revise the RBC requirement to reflect Farmer Mac's business and operating risks and changes to such risks. This letter identifies substantive concerns with the RBC Proposals and makes suggestions and observations that we believe will enhance the RBC requirement and help achieve FCA's objectives consistent with our statutory requirements and our Congressional mission. Our comments focus on two primary areas: (1) the treatment of loans for which origination data are not collected by Farmer Mac; and (2) the treatment of losses on defaulted loans. In addition, we provide several technical comments to the RBC Proposals and reiterate certain historical concerns that continue to exist with the RBC model.

I. Substantive Concerns

Treatment of Loans for which Origination Data are not Collected by Farmer Mac

The RBC Proposals, if adopted as proposed, would change the RBC stress test's ("RBCST") treatment of loans for which Farmer Mac does not collect certain loan origination data under its underwriting standards. These items of uncollected data are important to the current RBC model, a model whose functionality depends on variables representing loan origination data for debt-to-asset ratio ("DA"), loan-to-value ratio ("LTV"), and debt service coverage ratio ("DSC"), as well as inflation-adjusted loan size

and worst-case rates of decline in farmland values. Because Farmer Mac has adopted underwriting standards for certain loans, such as fast-track (i.e., reduced documentation), seasoned, and part-time farm loans that exclude the collection of certain origination loan data used for RBCST purposes, FCA proposes to apply loan data proxies that it believes conservatively reflect Farmer Mac's underwriting criteria. FCA proposes the following proxy values: (1) DA of 0.60; (2) LTV of 0.70; and (3) DSC of 1.20 (collectively referred to as the "Proposed Proxy Values").

We acknowledge that Farmer Mac's underwriting standards for seasoned and fast-track full-time farm loans, as well as part-time farm loans, do not provide for the collection of all the data that is necessary for the RBCST model to calculate a probability of default. Moreover, we agree that the use of proxy data could be appropriate in this circumstance. However, we believe that the Proposed Proxy Values are flawed in that they are inconsistent with Farmer Mac's underwriting standards for the vast majority of full-time farm loans, as well as with Farmer Mac's own risk exposure in actual practice. Accordingly, the Proposed Proxy Values should not be implemented because they are arbitrary, unsupported by any reasoned methodology, and based on what we view as an incorrect interpretation of the Farm Credit Act of 1971, as amended (the "Act").

FCA does not set forth a defined methodology or other evidence to support the validity of the Proposed Proxy Values. To the contrary, FCA justifies the selection of the Proposed Proxy Values as being consistent "with statutory requirements for a stressful, worst-case scenario." We believe this statutory interpretation is incorrect because it suggests that any missing loan data provides FCA with blanket authority to impose a worst-case scenario, paying no regard to Farmer Mac's actual loan data, practices and risk experience. In our view, the Act requires that FCA apply a well-defined stress scenario to Farmer Mac's actual book of business so as to accurately and fairly measure the risks and concomitant capital needs of that business. This means that if there is available information that would more closely approximate Farmer Mac's actual book of business, it should be utilized, as opposed to unrelated conservative proxy values. Once Farmer Mac's portfolio has been assessed accurately using the best available proxies for any truly missing information, it is at that point that the stressful, worst-case scenario should be applied.[1] The use of arbitrary and unsupported data unrelated to Farmer Mac's actual history of credit risk will not produce a RBCST that satisfies the requirements of the Act.

In addition to having no defined methodology to support them, the Proposed Proxy Values are unacceptable because they do not correlate strongly, or even adequately, to

[1] In establishing the RBC test, the Act requires the Director of OSMO to "take into account appropriate distinctions based on various types of agricultural mortgage products" and to "conform loan data used in determining credit risk to the minimum geographic and commodity diversification standards applicable to pools of qualified loans eligible for guarantee." 12 U.S.C. § 2279bb-1(b)(1).

Farmer Mac's actual core business and underwriting standards. The data are not derived from the values that would be expected in a typical Farmer Mac loan. In actual fact, they are at or beyond Farmer Mac's underwriting limits for its full-time farm loans and, as such, are highly unrepresentative of Farmer Mac's core business.[2] We know of no requirement in the Act that the mortgages should, unto themselves, represent a worst-case scenario for the abuse of Farmer Mac underwriting discretion. The table below shows Farmer Mac's loan type distribution for the past three fiscal years:

Loan Type Distribution (By Loan Count)

	12/31/2005		12/31/2004		12/31/2003	
	CW[3]	LTSPC[4]	CW[3]	LTSPC[4]	CW[3]	LTSPC[4]
Core Full-Time Farm	75%	87%	76%	86%	80%	85%
Fast-Track	11%	2%	11%	2%	1%	1%
Facility Loans	1%	2%	1%	3%	1%	2%
Revolving Line of Credit	1%	1%	1%	1%	1%	1%
Full-Time Farm Total	88%	92%	92%	92%	93%	89%
Part-Time Farm / Rural Housing	12%	8%	8%	8%	7%	11%
Total Portfolio	100%	100%	100%	100%	100%	100%

We believe that alternative proxy values that are based on a valid statistical methodology should be developed and used in the RBCST. Otherwise, proxy data used in the RBCST likely will, now and in the future, distort or misrepresent the risks of Farmer Mac's business and create unintended incentives for or against particular classes of loans. As proposed by FCA, the Proposed Proxy Values correspond to extremely unlikely outcomes relative to the known distributions of Farmer Mac loan characteristics.

Instead of the Proposed Proxy Values, we urge FCA to perform a well-defined, statistical calculation based on Farmer Mac's historical loan data to determine appropriate proxy

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[2] In fact, two of the three Proposed Proxy Values, DA and DSC, are not even relevant to Farmer Mac's underwriting standards for part-time farm loans because they are not utilized in the underwriting process for those loans. We would be pleased to work with FCA to develop an appropriate RBCST submodel for these loans.

[3] Cash window loans.

[4] Long-term standby purchase commitments.

values using statistical processes for the imputation of missing data and to utilize those values. Alternatively, Farmer Mac would be willing to perform such a calculation and submit it to FCA for review. Imputation is the process of "filling in" missing data with plausible values, and a large body of literature has developed on the topic since the 1970s. Statistical methods for the imputation of missing data include such approaches as weighted estimation and multiple imputation. The literature provides extensive guidance on these topics and many of these techniques are now available in standard statistical software packages.[5]

A broad distinction can be drawn between single imputation and multiple imputation methods. Single imputation methods include: (1) hot-deck imputation – substituting recorded values; (2) mean imputation – using averages of complete cases; and (3) regression imputation – predicting missing values using observed values. Multiple imputation methods repeat a single imputation method several times, using Monte Carlo simulation or resampling, and then studying the resulting mean and variance of the estimates of interest. Multiple imputation permits statements of statistical confidence to be made about the final estimates even in the presence of the additional uncertainty contributed by the missing data.

It should be noted that in the case of the RBCST, FCA has not proposed to use proxy data to re-estimate the underlying loan loss model parameters. Instead, the previously estimated model parameters are used to project future loan performance whenever certain categories of loans in Farmer Mac's portfolio are missing data items required by the model. For this purpose, a single imputation method such as mean or regression imputation provides a practical solution. For example, origination LTVs for Farmer Mac fast-track loans or seasoned loans subject to long-term standby purchase commitments ("LTSPCs") will resemble those of other agricultural mortgage loans originated at the same time, in the same location, or to borrowers specializing in similar specific farm products. Thus, using the estimated mean value of LTV within narrow loan origination groupings would generate relatively likely proxy values for the missing data.

Confidence intervals for the imputed values of LTV, DA, and DSC can be derived by applying multiple imputation. As described above, multiple imputation methods seek to characterize the underlying sampling distribution of the missing data and the additional error that may be introduced by the use of imputed values. As such, multiple imputation also provides a method for adopting statistically "conservative" values for the missing

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[5] Surveys of missing data methods are provided in Little and Rubin (1987), Rubin (1996), and Schafer and Graham (2002). Examples of applications of multiple imputation to agricultural data include Fetter (2001), Kott (1992), Ream and McCollum (2000), and Rubin and Schenker (1987). A useful FAQ page for implementation of multiple imputation using SAS® can be found on the internet at http://www.stat.psu.edu/~jls/mifaq.html. See Appendix 1 to this comment letter for relevant citations.

data, for example, by using the upper bound of the confidence interval in place of the imputed mean value.

It is important to note that application of multiple imputation does not require that loans with missing data items comprise a random sample of all loans. The literature on multiple imputation recognizes three primary forms of missing data: (1) Missing Completely At Random ("MCAR"); (2) Missing At Random ("MAR"); and (3) Missing Not At Random ("MNAR"). Below is a discussion of each of these forms of missing data in the context of missing data items on Farmer Mac loans in the RBCST.

MCAR implies that the probability distribution of missing values does not depend on either the observed or missing values, and can simply be ignored for the purposes of estimation, or handled through re-weighting for the purpose of computing population statistics. This situation most closely resembles the current version of the RBCST, in which the results for loans without missing data are used to project the loan performance of all loans. In our view, there is no justification to depart from this approach in the absence of evidence that this assumption is untenable.[6]

Under MAR, the probability distribution of missing values may depend on observed data, but not on missing data. For example, average LTVs may differ for loans originated at different times, in different locations, or to borrowers engaged in different sectors of agricultural production. However, within loan groupings defined by these observed characteristics, one would not expect LTVs to differ significantly for loans with and without reported values of LTV. Thus, when the data is MAR, other observed loan characteristics provide a basis for modeling the missing data.

MNAR assumes that the missing data depends on both the observed data and the values of the missing items themselves. This would correspond to a situation, for example, in which LTV values are more likely to be missing when the actual LTV value is higher or lower than the average LTV within categories defined by observed characteristics. Whether MNAR implies any significant additional error in the process of imputation over the preceding case of MAR depends on the relative variation of the data item of interest across and within the categories defined by observed characteristics. If, for example, LTV values are relatively concentrated around their mean values within categories defined by observed characteristics, the results under MNAR will resemble those under MAR.

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[6] In the "Multiple Imputation Parameter Estimates" table below, you will find statistical evidence that the missing values of DA, LTV and DSC fall within a relatively narrow range of the observed data.

For your consideration we have provided below an example of utilizing multiple imputation.[7] The dataset for this analysis started with the universe of full-time farm loans guaranteed by Farmer Mac or subject to LTSPCs. Data screens identical to those used in the RBCST's Credit Loss Module were used when calculating the ratios.[8]

Multiple Imputation Parameter Estimates[9,10]

Variable	Mean	Standard Error	95% Confidence Interval
LTV	0.504	0.002	0.501 to 0.507
DA	0.338	0.001	0.335 to 0.341
DSC	2.099	0.010	2.080 to 2.118

This example of missing data imputation illustrates two important points. First, the "expected" values of the missing data, given the observed values, are significantly different from the Proposed Proxy Values. This indicates that the Proposed Proxy Values are extreme outliers in the distribution and not at all representative of the distribution of loans in Farmer Mac's loan portfolio. Second, the 95% confidence intervals are generally very tight, indicating a high level of statistical confidence in the parameter estimates.

Although we believe the use of statistical processes for the imputation of missing data is the most appropriate methodology to determine the proxy values, an alternative simple method could involve calculations of percentiles for the underwriting ratios and consistently selecting a cutoff percentile. This methodology would be preferable to simply selecting data cutoff values with no supporting methodology. The table below illustrates the proxy values that would arise from the selected percentiles. Here again, it illustrates the extent to which the Proposed Proxy Values are outliers from the distribution of underwriting ratios.

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7 Standard statistical software packages such as SAS® include a wide range of imputation methods. The analysis was conducted in SAS® using PROC MI.

8 When the screens found values that were determined to be either missing or "implausible," the ratio being calculated was automatically replaced with a missing value.

9 The estimates in this table are for the overall mean values of LTV, DA, and DSC. As suggested above, a more detailed set of proxy values could be developed for loans classified according to other available information, such as location, time period, or product specialization.

10 We have included a summary of the parameter estimates contained in this table along with the full SAS® output from the analysis in Appendix 2 to this letter.

Actual Underwriting Ratio Percentiles (All Non-Seasoned Standard FTF Loans)

Measure	LTV	DA	DSC
95th / 5th Percentile*	0.75	0.52	1.24
90th / 10th Percentile*	0.70	0.49	1.28
75th / 25th Percentile*	0.64	0.44	1.41
50th Percentile	0.54	0.35	1.71
Full-Time Farm Underwriting Standards	0.70	0.50	1.25
FCA Proposed	0.70	0.60	1.20

* Higher Percentile for LTV and DA, Lower Percentile for DSC

Assumptions Regarding Loan Loss Resolution Timing

The RBC Proposals would change the treatment of losses on defaulting loans. While we agree with aspects of the change in treatment suggested, Farmer Mac has concerns about certain of the modifications suggested in the RBC Proposals, as well as the validity of certain assumptions made therein.

As Farmer Mac now has information regarding actual loan resolution timing that indicates the entire process from the point of default to final disposition (the "Relevant Time") may take longer than the one year previously assumed, we are in agreement with the RBC Proposals that the assumed period should be increased. We also are not opposed to utilizing initially the 2.17 year period set forth in the RBC Proposals.

We note, however, that in the future the Relevant Time for this calculation may change. For example, in a heavy stress economic environment with large numbers of losses, a 1.00 year period might be more appropriate than the 2.17 year period, because there could be a need or a desire to dispose of properties more quickly in such an environment. The length of this period may also decrease due to improved servicing processes and favorable economic environments. Changes to the economic environment would, of course, affect the length of this period at any given time. Accordingly, Farmer Mac believes it would be helpful to develop a clear methodology for calculating the Relevant Time, as well as to establish a schedule to indicate how often the Relevant Time should be recalculated. We suggest that it would be appropriate for the Relevant Time to be recalculated on an annual basis in order sufficiently to connect the Relevant Time to Farmer Mac's actual operations, consistent with FCA's stated goal of adapting the model to Farmer Mac's actual operations on an on-going basis to the extent practicable. While it is difficult for us to propose a calculation methodology, as it is unclear exactly how the

2.17 year period was calculated by FCA, we have been able to approximate FCA's methodology by subtracting the Interest Paid Through Date from the Real Estate Owned ("REO") Date for each loan and then calculating a simple average of this series. This calculation would be more acceptable to Farmer Mac as the official methodology to calculate the Relevant Time.

The RBC Proposals attempt to account for the additional carrying costs associated with the portion of the loan loss resolution timing period in excess of one year (which would increase initially to 2.17 years under the proposals) by making certain technical modifications we think are inconsistent with Farmer Mac's actual business practices and do not properly measure such additional carrying costs. Under the RBC Proposals, FCA assumes that off-balance sheet loans cease to generate guarantee fee income and are purchased from the LTSPC portfolio and funded at the short-term cost of funds[11] used in the model for liabilities of less than one-year duration. The same short-term funding assumption also applies to REO assets that arise from these non-performing loans. Parallel to its treatment of off-balance sheet loans, FCA assumes that on-balance sheet loans cease to generate interest earnings, but continue to generate interest expense at the blended long-term and short-term funding rates used in the model. We see no basis to assume or conclude that in every circumstance there would be a difference in funding costs for REO assets that arise from on-balance sheet loans as compared to REO assets that arise from off-balance sheet loans or that this funding assumption would continue to apply to REO assets arising from these non-performing loans.

The purchase of non-performing off-balance sheet loans would be funded in a manner that reflects existing yield curve conditions and REO disposition expectations, which would imply short-term funding in the preponderance of cases. Non-performing on-balance sheet loans do not require additional funding as they transition to REO assets, but the shorter expected duration of REO assets will give rise to a mismatch between the overall duration of assets and the existing mix of short-term and long-term liabilities. In response to the shortened duration of assets, short-term debt could be issued to fund the purchase of additional performing loans that would be duration-matched to the previously existing long-term funding, and that funding would be "crossed" with the funding of the shorter expected duration of the REO assets. Foreclosure property sale proceeds from disposition of the REO assets would then be used to retire any excess of short-term funding. Thus, REO assets acquired from either off-balance sheet guaranteed securities or LTSPCs or on-balance sheet mortgage investments would effectively be funded short-term. In actual practice, the mix of short-term versus long-term funding of REO assets would reflect the optimal strategy in light of existing yield curve conditions. This implies that no special assumptions are required regarding the funding of REO versus loan assets.

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[11] See our comment in Section II of this comment letter, "Linkage for Funding Cost for Off-Balance Sheet Buyout Loans" for an implementation issue regarding this calculation.

Accordingly, we encourage FCA to withdraw the proposed modification that results in differential funding treatment for on- and off-balance sheet non-performing loans.

Furthermore, the proposal to use the blended short-term and long-term fixed rates, including the effect of the stress test shocks, is, in our view, contradictory. As a notable example, long-term fixed rate debt outstanding at the start of the stress test would be unaffected by the presumed increase in interest rates. Thus, if FCA were to require the use of long-term debt to fund on-balance sheet non-performing loans, the funding costs also should reflect the lower pre-shock interest rates on these liabilities, inasmuch as that funding was in place prior to the beginning of the stress test (and there is no reason to imagine it would abruptly disappear). This should be just an aside, as we consider our explanation above (explaining why it is unnecessary to make any special assumptions about the funding of non-performing loans and REO assets) to be dispositive.

Based on the foregoing, we would respectfully submit that the most reasonable and practical solution would be to continue to assume that both non-performing loans and REO assets are funded with short-term liabilities. The income implications of these non-performing loans are accounted for by the cessation of guarantee fee and interest income, and any additional net interest expense is reflected in the current mix of liabilities under the steady-state assumption. Furthermore, some level of accrued interest expense is already accounted for by the existing loss severity assumptions of the RBCST. Consistent with industry practice, the loss severity ratio applied in the RBCST, relying on historical loss experience data, already would have included losses from unpaid loan balances, accumulated loan interest, REO brokerage and disposition expenses, and legal costs, offset by gains from the sale of foreclosed properties.

II. Technical Concerns

Linkage for Funding Cost for Off-Balance Sheet Buyout Loans

The RBC Proposals provide, in relevant part, "[o]ff-balance sheet loans associated with losses are assumed to be purchased from the Standby portfolio and fully funded at the short-term cost of funds rate used in the model". This statement is inconsistent with the actual formula used in the proposed RBCST worksheet to calculate the funding cost for off-balance sheet buyouts. The RBC worksheet is actually using the total interest expense (inclusive of swaps) divided by total liabilities to derive the funding cost for off-balance sheet buyout loans. This is not consistent with the language of the RBC Proposals cited above. Our suggested correction to the formula is simply to divide the interest expense for liabilities due within one year by the amount of liabilities due within one year.

Revise the Operating Expense Regression Equation

The current RBCST utilizes a regression equation to estimate operating expenses in future years that relate historic Farmer Mac operating expenses to a constructed variable reflecting loan and investment volumes, and includes a dummy variable for pre- and post-1996 data to account for the impact of legislative changes that affect the cost structure. The RBC Proposals would drop the dummy variable and, instead, include multiple variables to account for the impact of different business activities that contribute to annualized expenses separated by: (1) on-balance sheet investments; (2) on-balance sheet guaranteed securities; (3) the sum of off-balance sheet loans in the Farmer Mac I and II programs; and (4) gross REO.

We agree with the proposal to drop the dummy variable, but we have technical concerns about the operation of the equation set forth in the RBC Proposals. The expense regression is estimated over a long time series of quarterly data and purports to explain the marginal contributions of different business activities to total operating expenses. However, the largest component of expenses is fixed costs, which are represented by the constant term in the regression equation. When the equation is estimated retrospectively over previous ending dates, it consistently results in negative coefficient estimates for on-balance sheet guaranteed securities and the sum of off-balance sheet loans in the Farmer Mac I and II programs. As a characterization of gross operating expenses, it is not possible that increasing the volume of a specific business activity, while holding all other activities at constant levels, could result in a reduction of total expenses (fixed plus variable). In our view, this result suggests that the regression results arise from the fact that one activity increased while another decreased over the time period covered by the data, while total operating expenses remained relatively constant.

We recommend that FCA, consistent with its proposals for other components of Farmer Mac's income statement, use a simpler approach – one we believe would provide a more accurate picture of Farmer Mac's operating expenses. The approach to operating expenses should parallel the approaches taken in the RBC Proposals to miscellaneous income and gain on sales of AMBS by using recent average values to set the level of operating expenses during the stress period. Under the steady-state requirement of the RBCST, the four items used as explanatory variables in the expense regression are backfilled to remain constant over the 10-year model horizon. This implies that operating costs are constant in the model during the stress period and that the stress imposed by the model does not affect the level of operating expenses through the stress period. The constancy of operating costs during the stress period negates the need for a more complicated expression that relates the balance sheet to expenses. Thus, we believe that a recent average of actual operating expenses would provide a more transparent representation of Farmer Mac's actual performance.

If FCA does not accept our reasoning set forth above and elects to apply a regression model for operating expenses, while emphasizing our objection to this approach, we submit that FCA's proposed equation is still flawed. It currently reads as follows:

$$\text{Expenses} = \alpha + \beta_1 \cdot \ln(\text{OnF}_t) + \beta_2 \cdot \ln(\text{OnGS}_t) + \beta_3 \cdot \ln(\text{OffI}_t + \text{OffII}_t) + \beta_4 \cdot \ln(\text{REO}_t)$$

In view of the shortcomings of this specification cited above, FCA should have at least applied the following alternative specification for the logarithm of the expense "ratio" (operating expenses divided by assets) as a linear function of the percentage contribution of each of the business activities:

$$\ln\left(\frac{\text{Expenses}}{\text{Assets}}\right) = \beta_1 \cdot \ln\left(\frac{\text{OnF}_t}{\text{Assets}}\right) + \beta_2 \cdot \ln\left(\frac{\text{OnGS}_t}{\text{Assets}}\right) + \beta_3 \cdot \ln\left(\frac{\text{OffI}_t + \text{OffII}_t}{\text{Assets}}\right) + \beta_4 \cdot \ln\left(\frac{\text{REO}_t}{\text{Assets}}\right)$$

Thus, although this specification falls short of the logical preference to omit a regression model, it nevertheless provides a better characterization of Farmer Mac's actual cost structure, and attributes most of the variation in Farmer Mac's operating expenses to the two major on-balance sheet investment categories. The table below summarizes the results of estimating this equation:

Operating Expense Regression

Variables	Model Summary			
Dependent Variable: ln(Operating Expenses)	Coef.	Std. Err.	t	P-value
ln(On Balance Sheet Investments)	4.16	0.24	17.02	0.000
ln(On Balance Sheet Guaranteed Securities)	3.45	0.46	7.43	0.000
ln(Off Balance Sheet Farmer Mac I and II Loans)	-0.05	0.02	-2.70	0.013
ln(Gross Real Estate Owned)	0.31	0.23	-1.36	0.187

Estimation Summary	
Number of Observations	26
F(4,22)	6279.88
R-Square	0.9991
Adjusted R-Square	0.9990
Root MSE	0.1820

This approach still allows the [β] coefficients to be negative, but these will now correspond to the marginal change in the expense "ratio" as specific business activities increase or decrease, rather than implying that total expenses decline as one activity increases and others are held constant. Importantly, this approach would provide a better characterization of Farmer Mac's actual cost structure by avoiding the incorrect attribution of increasing operating expenses from one business activity to a different business activity.

Update Balance Sheet and Income Statement Categories

Over time, the line items disclosed in the financial statements Farmer Mac files with the Securities and Exchange Commission ("SEC") have evolved due to changes in applicable accounting rules and policies. As a result, the financial statements contained in the Data Inputs section of the RBCST no longer reflect accurately these line items. Because of this inconsistency, populating data from Farmer Mac's financial statements has become increasingly time-consuming and the lack of consistency with the SEC-filed financial statements is potentially confusing for users of this information, a matter of particular importance for a publicly-traded company subject to investor scrutiny under the disclosure provisions of the federal securities laws. Thus, we request that the balance sheet and income statement line items contained in the Data Inputs section of the RBCST be re-aligned to be consistent with the categories that are used in financial statements in Farmer Mac's SEC filings. We would also recommend that a provision be added to the rules to enable periodic updating of the financial statements in the Data Inputs section of the RBCST for consistency with Farmer Mac's SEC filings.

Add Rating Categories to Investment Haircut Workbook

The Investment Haircut worksheet in the RBCST is designed to determine the weighted average haircut for various classes of investments on Farmer Mac's balance sheet. To perform the calculation, a listing of ratings contained in a lookup range[12] maps the rating to the required haircut. In fact, the ratings contained in the lookup range do not reflect all the possible ratings within the range used by Farmer Mac or contained in the "haircut defs" worksheet. For example, Farmer Mac invests in numerous commercial paper issues that are rated P1 by Standard & Poor's. However, the lookup range does not include P1 as a separate rating (the closest match is "A1/P1"). Because the lookup range does not include an exact match to the issue's rating, the calculation for the issue's haircut will return "#N/A". As a result, manual modification is required, which makes the process more time-consuming and requires the analyst to estimate the best match for a particular rating. Thus, we request that the lookup range be expanded to reflect the full complement of possible ratings.

[12] Cells P136:R165 in the "pre proc" worksheet.

Calculation of Moving Averages for Miscellaneous Income and Gain on Sale of AMBS

We do not think that the existing formulae used to calculate the moving average for miscellaneous income and gain on sale of AMBS are true moving averages. The existing formulae sum the numerator and denominator values over the specified time horizon and then annualize the quotient.[13] Instead, we believe that the correct method to calculate the moving average is first to calculate the quarterly ratios, annualize these ratios, and then to compute the moving average over the appropriate time horizon. The values generated by this proposed methodology would represent a more accurate moving average calculation. We would be pleased to provide FCA with supplemental data to illustrate the calculation methodology we propose.

III. Historical Concerns

Farmer Mac would like to note and reaffirm, as part of this comment process, our long-standing concerns[14] with respect to the application of the historical benchmark loss experience as the source of credit risk stress in the RBCST, including that: (1) the historical benchmark loss experience is unsubstantiated by actual default and loss experience; (2) the historical benchmark corresponds to a time period not covered by the estimated default model and the estimated default model is not consistent with loss experience outside the sample used for estimation; (3) technical problems related to the extrapolation process remain unresolved; (4) the application of the benchmark land value stress scenario is inconsistent with the estimated lifetime default model and is unnecessarily complicated; and (5) the underwriting screens applied to the historical Farm Credit Bank of Texas ("FCBT") data include loans ineligible for Farmer Mac's programs. Simply put, these uncorrected flaws result in a picture of "historical" experience that never occurred in one place and at one time and cannot genuinely be called historical, and move a critical multiplier up an extraordinary 53%, from 2.73% to 4.18%. Addressing this correction alone could be as important as addressing all the other comments in this letter.

We continue to maintain that FCA should withdraw the extrapolation process and use the FCBT data, without extrapolation, to establish the benchmark loss experience. We also continue to believe that the extrapolation of the benchmark loss rate by FCA is beyond the scope of the Act. In this regard, FCA has departed from the plain language of the Act as well as the logic of its own analysis to design components of the stress test in a manner that tends to increase artificially the resulting RBC requirements. Indeed, several of the

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[13] The calculation of the gain on sale of AMBS is inconsistent with the miscellaneous income calculation in that the quarterly rate is not annualized.

[14] See, for example, Farmer Mac's letter to FCA dated June 12, 2000. Farmer Mac would be pleased to provide FCA with a copy of this letter, if requested.

concerns regarding data and modeling issues raised by Farmer Mac in its 2000 comment letter were also identified by the General Accounting Office report issued in 2003.

In conclusion, we would emphasize that Farmer Mac strongly agrees with FCA's desire to have a RBCST that more accurately reflects the risks of Farmer Mac's business as required by the Act and best business and corporate governance practices. We would welcome the opportunity to engage in a dialogue with you about these matters. Please contact Tim Buzby, at (202) 872-5553, at your convenience.

Thank you, in advance, for FCA's thoughtful consideration of these comments and our request for further discussion.

Very truly yours,

Henry D. Edelman
President and Chief Executive Officer

Attachments

Appendix 1

References

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Appendix 2

The SAS System

The MI Procedure

Model Information

Data Set	WORK.TEST
Method	MCMC
Multiple Imputation Chain	Single Chain
Initial Estimates for MCMC	EM Posterior Mode
Start	Starting Value
Prior	Jeffreys
Number of Imputations	5
Number of Burn-in Iterations	200
Number of Iterations	100
Seed for random number generator	501214

Missing Data Patterns

						Group Means		
Group	calc_ltv	calc_da	calc_tdc	Freq	Percent	calc_ltv	calc_da	calc_tdc
1	X	X	X	9071	37.33	0.501342	0.346324	2.068619
2	X	X	.	6328	26.04	0.518920	0.327573	.
3	X	.	X	394	1.62	0.523877	.	2.301139
4	X	.	.	8234	33.88	0.493445	.	.
5	.	X	X	119	0.49	.	0.333445	2.009568
6	.	X	.	37	0.15	.	0.306026	.
7	.	.	X	3	0.01	.	.	2.967318
8	O	O	O	115	0.47	.	.	.

EM (Posterior Mode) Estimates

TYPE	_NAME_	calc_ltv	calc_da	calc_tdc
MEAN		0.503616	0.338050	2.096424
COV	calc_ltv	0.057427	0.003837	0.003579
COV	calc_da	0.003837	0.017836	-0.042199
COV	calc_tdc	0.003579	-0.042199	1.800105

Multiple Imputation Variance Information

	Variance			
Variable	Between	Within	Total	DF
calc_ltv	2.2775614E-8	0.000002375	0.000002402	13479
calc_da	0.000000611	0.000000735	0.000001469	16.019
calc_tdc	0.000013447	0.000074790	0.000090926	126.21

Multiple Imputation Variance Information

Variable	Relative Increase in Variance	Fraction Missing Information	Relative Efficiency
calc_ltv	0.011509	0.011442	0.997717
calc_da	0.997480	0.551955	0.900584
calc_tdc	0.215749	0.190115	0.963370

Multiple Imputation Parameter Estimates

Variable	Mean	Std Error	95% Confidence Limits		DF
calc_ltv	0.503540	0.001550	0.500502	0.506578	13479
calc_da	0.337956	0.001212	0.335387	0.340525	16.019
calc_tdc	2.098935	0.009536	2.080065	2.117805	126.21

Multiple Imputation Parameter Estimates

Variable	Minimum	Maximum	Mu0	t for H0: Mean=Mu0	Pr > |t|
calc_ltv	0.503401	0.503798	0	324.89	<.0001
calc_da	0.336970	0.339146	0	278.86	<.0001
calc_tdc	2.095122	2.104918	0	220.12	<.0001